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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/006,608	11/30/2001	Michael Neal	DEM1P008	1143

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EXAMINER	
CANGIALOSI, SALVATORE A	
ART UNIT	**PAPER NUMBER**
3621	

DATE MAILED: 01/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/006,608	NEAL ET AL.	
	Examiner	Art Unit	
	Salvatore Cangialosi	3621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 November 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *11/05/2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

1. Examiner objects to the plurality of information disclosure statements which contain in excess of 100 references. It is desirable to avoid the submission of long lists of documents if it can be avoided and eliminate clearly irrelevant and marginally pertinent cumulative information. Since a long list has been submitted, it is requested that the applicants highlight those documents which have been specifically brought to applicant's attention and/or are known to be of most significance. See Penn Yan Boats, Inc. v. Sea Lark Boats, Inc., 359 F. Supp. 948, 175 USPQ 260 (S.D. Fla. 1972), aff 'd, 479 F.2d 1338, 178 USPQ 577 (5th Cir. 1973), cert. denied, 414 U.S. 874 (1974). But cf. Molins PLC v. Textron Inc., 48 F.3d 1172, 33 USPQ2d 1823 (Fed. Cir. 1995).

2. The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

> A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
>
> Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

3. Claims 1-24 are rejected under 35 U.S.C. § 103 as being unpatentable over Ouimet et al (6094641) in view of Hartman et al (5987425) and either Delurgio et al (6553352) or Smith ("A General Bayesian Linear Model"(4/72)), all cited by the applicants.

Regarding claim 1, Ouimet et al (See abstract, Figs. 1- 6, Col. 2, lines 55-65, Col. 4, lines 35-60, claims 1, 12 and 21) disclose a means for optimizing the price of an item based on a selected demand model employing a grid (See Fig. 6)to set price in an automated fashion in a digital computer substantially as claimed. The differences between the above and the claimed invention is the use of a specific model and product subsets. It is noted that it is believed that the price is always determined for a subset of items which is functionally equivalent to the claimed limitations. Hartman et al (See abstract, and Fig. 1 show product subsets which is the functional equivalent of a master serial number. Delurgio et al (See abstract and claim 34) or Smith show Bayesian models employed in optimization of price(note that these are but a few of the cited references employing Bayesian models in price optimization. It would have been obvious to the person having ordinary skill in this art to provide a similar arrangement for Ouimet et al because the suggestion to employ any demand model(col. 2, line 60) teaches that all models are conventional functional equivalents with respect to the claim limitations in

price optimization. Regarding subset limitations of claim 2, Delurgio et al(Col. 11, lines 20 -30) show subsets which are functional equivalents of the claim limitations. Regarding selection limitations of claim 3, Delurgio et al(Col. 11, lines 20 -30) show product mix selection which is a functional equivalent of the claim limitations. Regarding optimization limitations of claim 4, Ouimet et al (See abstract, Figs. 1- 6, Col. 2, lines 55-65, Col. 4, lines 35-60, claims 1, 12 and 21) disclose a means for optimizing the price of an item based on a selected demand model employing a grid (See Fig. 6)to set price which are the functional equivalents of the claim limitations. Regarding the data limitations of claim 5, Ouimet et al (See abstract, Figs. 1- 6, Col. 2, lines 55-65, Col. 4, lines 35-60, claims 1, 12 and 21) disclose a means for optimizing the price of an item based on a selected demand model employing a grid (See Fig. 6)to set price including prior price history which is a functional equivalent of the claim limitations. Regarding the data limitations of claim 6, Ouimet et al (See abstract, Figs. 1-6, Col. 2, lines 55-65, Col. 4, lines 35-60, claims 1, 12 and 21) disclose a means for optimizing the price of an item based on a selected demand model employing a grid (See Fig. 6)to set price including prior price history which is a functional equivalent of the claim limitations. Regarding the rule limitations of claim 7, Delurgio et al(Figs. 14, 34-38) show rule criteria including a rule generator(elements 416-420) which is a functional equivalent

of the claim limitations. Regarding the rule limitations of claim 8, Delurgio et al(Figs. 14, 34-38) show rule criteria including a rule generator(elements 416-420) which is a functional equivalent of the claim limitations. Regarding optimization limitations of claim 9, Ouimet et al (See abstract, Figs. 1- 6, Col. 2, lines 55-65, Col. 4, lines 35-60, claims 1, 12 and 21) disclose a means for optimizing the price of an item based on a selected demand model employing a grid (See Fig. 6)to set price which are the functional equivalents of the claim limitations. Regarding the data limitations of claim 10, Ouimet et al (See abstract, Figs. 1- 6, Col. 2, lines 55-65, Col. 4, lines 35-60, claims 1, 12 and 21) disclose a means for optimizing the price of an item based on a selected demand model employing a grid (See Fig. 6)to set price including prior price history which is a functional equivalent of the claim limitations. Regarding the data limitations of claim 11, Ouimet et al (See abstract, Figs. 1- 6, Col. 2, lines 55-65, Col. 4, lines 35-60, claims 1, 12 and 21) disclose a means for optimizing the price of an item based on a selected demand model employing a grid (See Fig. 6)to set price including prior price history which is a functional equivalent of the claim limitations. Regarding the rule limitations of claim 12, Delurgio et al(Figs. 14, 34-38) show rule criteria including a rule generator(elements 416-420) which is a functional equivalent of the claim limitations. Regarding claim 14, Ouimet et al (See abstract, Figs. 1- 6, Col. 2, lines 55-65, Col. 4, lines 35-60,

claims 1, 12 and 21) disclose a method for optimizing the price of an item based on a selected demand model employing a grid (See Fig. 6)to set price in an automated fashion in a digital computer substantially as claimed. The differences between the above and the claimed invention is the use of a specific model and product subsets. It is noted that it is believed that the price is always determined for a subset of items which is functionally equivalent to the claimed limitations. Hartman et al (See abstract, and Fig. 1 show product subsets which is the functional equivalent of a master serial number. Delurgio et al (See abstract and claim 34) or Smith show Bayesian models employed in optimization of price(note that these are but a few of the cited references employing Bayesian models in price optimization. It would have been obvious to the person having ordinary skill in this art to provide a similar arrangement for Ouimet et al because the suggestion to employ any demand model(col. 2, line 60) teaches that all models are conventional functional equivalents with respect to the claim limitations in price optimization. Regarding subset limitations of claim 15, Delurgio et al(Col. 11, lines 20 -30) show subsets which are functional equivalents of the claim limitations. Regarding selection limitations of claim 16, Delurgio et al(Col. 11, lines 20 -30) show product mix selection which is a functional equivalent of the claim limitations. Regarding optimization limitations of claim 17, Ouimet et al (See abstract, Figs. 1- 6, Col. 2, lines

55-65, Col. 4, lines 35-60, claims 1, 12 and 21) disclose a means for optimizing the price of an item based on a selected demand model employing a grid (See Fig. 6)to set price which are the functional equivalents of the claim limitations. Regarding the data limitations of claim 18, Ouimet et al (See abstract, Figs. 1- 6, Col. 2, lines 55-65, Col. 4, lines 35-60, claims 1, 12 and 21) disclose a means for optimizing the price of an item based on a selected demand model employing a grid (See Fig. 6)to set price including prior price history which is a functional equivalent of the claim limitations. Regarding the data limitations of claim 19, Ouimet et al (See abstract, Figs. 1- 6, Col. 2, lines 55-65, Col. 4, lines 35-60, claims 1, 12 and 21) disclose a means for optimizing the price of an item based on a selected demand model employing a grid (See Fig. 6)to set price including prior price history which is a functional equivalent of the claim limitations. Regarding the rule limitations of claim 20, Delurgio et al(Figs. 14, 34-38) show rule criteria including a rule generator(elements 416-420) which is a functional equivalent of the claim limitations. Regarding claim 21, Ouimet et al (See abstract, Figs. 1- 6, Col. 2, lines 55-65, Col. 4, lines 35-60, claims 1, 12 and 21) disclose a method for optimizing the price of an item based on a selected demand model employing a grid (See Fig. 6)to set price in an automated fashion in a digital computer substantially as claimed. The differences between the above and the claimed invention is the use of a specific model and product

subsets. It is noted that it is believed that the price is always determined for a subset of items which is functionally equivalent to the claimed limitations. Hartman et al (See abstract, and Fig. 1 show product subsets which is the functional equivalent of a master serial number. Delurgio et al (See abstract and claim 34) or Smith show Bayesian models employed in optimization of price(note that these are but a few of the cited references employing Bayesian models in price optimization. It would have been obvious to the person having ordinary skill in this art to provide a similar arrangement for Ouimet et al because the suggestion to employ any demand model(col. 2, line 60) teaches that all models are conventional functional equivalents with respect to the claim limitations in price optimization. Regarding claim 2, Ouimet et al (See abstract, Figs. 1- 6, Col. 2, lines 55-65, Col. 4, lines 35-60, claims 1, 12 and 21) disclose a signal means for optimizing the price of an item based on a selected demand model employing a grid (See Fig. 6)to set price in an automated fashion in a digital computer substantially as claimed. The differences between the above and the claimed invention is the use of a specific model and product subsets. It is noted that it is believed that the price is always determined for a subset of items which is functionally equivalent to the claimed limitations. Hartman et al (See abstract, and Fig. 1 show product subsets which is the functional equivalent of a master serial number. Delurgio et al (See

abstract and claim 34) or Smith show Bayesian models employed in optimization of price(note that these are but a few of the cited references employing Bayesian models in price optimization. It would have been obvious to the person having ordinary skill in this art to provide a similar arrangement for Ouimet et al because the suggestion to employ any demand model(col. 2, line 60) teaches that all models are conventional functional equivalents with respect to the claim limitations in price optimization. Regarding claim 23, Ouimet et al (See abstract, Figs. 1- 6, Col. 2, lines 55-65, Col. 4, lines 35-60, claims 1, 12 and 21) disclose a means including a database for optimizing the price of an item based on a selected demand model employing a grid (See Fig. 6)to set price in an automated fashion in a digital computer substantially as claimed. The differences between the above and the claimed invention is the use of a specific model and product subsets. It is noted that it is believed that the price is always determined for a subset of items which is functionally equivalent to the claimed limitations. Hartman et al (See abstract, and Fig. 1 show product subsets which is the functional equivalent of a master serial number. Delurgio et al (See abstract and claim 34) or Smith show Bayesian models employed in optimization of price(note that these are but a few of the cited references employing Bayesian models in price optimization. It would have been obvious to the person having ordinary skill in this art to

provide a similar arrangement for Ouimet et al because the suggestion to employ any demand model(col. 2, line 60) teaches that all models are conventional functional equivalents with respect to the claim limitations in price optimization. Regarding claim 24, Ouimet et al (See abstract, Figs. 1- 6, Col. 2, lines 55-65, Col. 4, lines 35-60, claims 1, 12 and 21) disclose a method for optimizing the price of an item based on a selected demand model employing a grid (See Fig. 6)to set price in an automated fashion in a digital computer substantially as claimed. The differences between the above and the claimed invention is the use of a specific model and product subsets. It is noted that it is believed that the price is always determined for a subset of items which is functionally equivalent to the claimed limitations. Hartman et al (See abstract, and Fig. 1 show product subsets which is the functional equivalent of a master serial number. Delurgio et al (See abstract and claim 34) or Smith show Bayesian models employed in optimization of price(note that these are but a few of the cited references employing Bayesian models in price optimization. It would have been obvious to the person having ordinary skill in this art to provide a similar arrangement for Ouimet et al because the suggestion to employ any demand model(col. 2, line 60) teaches that all models are conventional functional equivalents with respect to the claim limitations in price optimization.

4.35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requires of this title.

5.Claims 14-24 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The basis of this rejection is set forth in a two-prong test of:

(1) whether the invention is within the technological arts; and

(2) whether the invention produces a useful, concrete, and tangible result.

For a claimed invention to be statutory, the claimed invention must be within the technological arts. Mere ideas in the abstract (i.e., abstract idea, law of nature, natural phenomena) that do not apply, involve, use, or advance the technological arts fail to promote the "progress of science and the useful arts" (i.e., the physical sciences as opposed to social sciences, for example) and therefore are found to be non-statutory subject matter. For a process claim to pass muster, the recited process must somehow apply, involve, use, or advance the technological arts.

In the present case, No technology is present other than inferentially it is merely the optimization of price which has been done by merchants for millennia.

Any inquiry concerning this communication should be directed to Salvatore Cangialosi at telephone number (703) 305-1837. The examiner can normally be reached 6:30 Am to 5:00 PM, Tuesday through Friday. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Trammell, can be reached at (703) 305-9768.

Any response to this action should be mailed to:

Commissioner of Patent and Trademarks
Washington, D.C. 20231

or faxed to (703)872-9306

Hand delivered responses should be brought to Crystal Park V, 2451 Crystal Drive, Arlington, Virginia, Seventh Floor(Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 3600 Customer Service Office whose telephone number is (703) **308-4177**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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